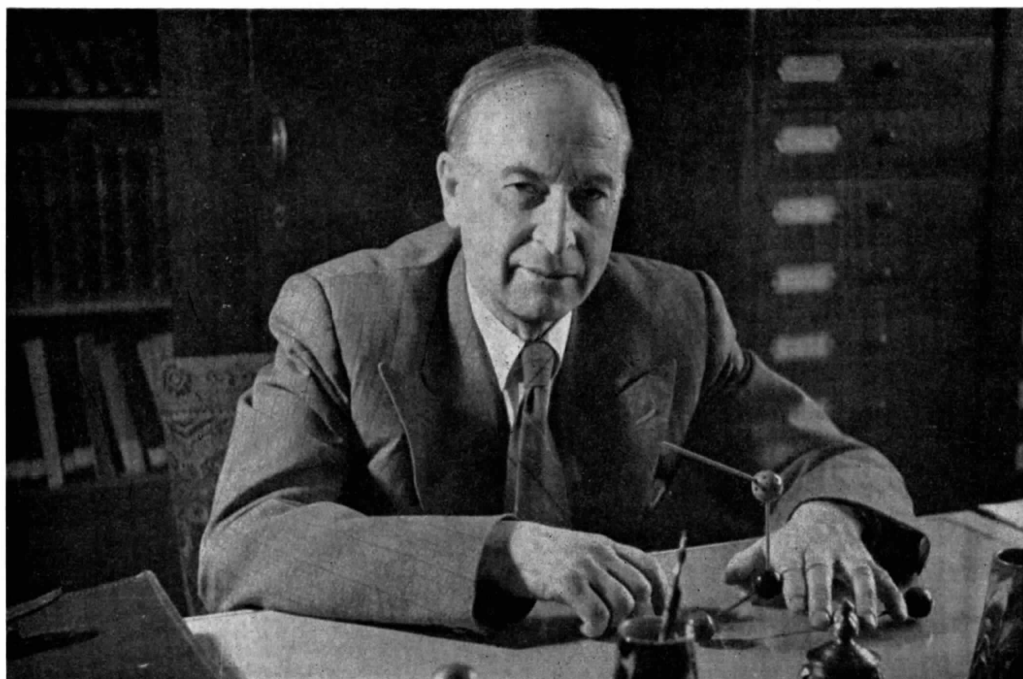


## Obituary



**Alexey Vasilyevich Shubnikov 1887-1970**

Alexey Vasilyevich Shubnikov died on 27 April, 1970. With his passing, Soviet crystallography lost its most distinguished member.

A. V. Shubnikov stood for nearly half a century as the leader of our science in the USSR, he was its crystallographer number one, the greatest authority on all questions of symmetry, and the creator of the apparently most abstract science of antisymmetry which, however, very rapidly found a practical application first of all in the fields of magnetism, ferromagnetism, ferroelectricity (1651 Shubnikov groups). He was the first to develop the theoretical and practical methods of mechanical treatment of natural crystals; he was a pioneer in designing and constructing the large plants for crystal growing that later were used for scientific and practical purposes. He was noted for the development of the first polycrystalline anisotropic media. He always paid a great deal of attention to the analysis of crystal-growth processes and to them a number of his popular lectures and textbooks were devoted. No doubt his greatest achievement was the foundation of the Institute of Crystallography and setting it on the path of physics and industrialization. A. V. Shubnikov was among those enthusiasts who initiated the creation of the International Union of Crystallography, and in 1946 he became a member of the first Editorial Board of *Acta Crystallographica*. It was he who suggested this international name for the Journal.

Academician A. V. Shubnikov was born on March 29, 1887 in Moscow. While a student, under the in-

fluence of his teacher G. V. Wulf, the well-known crystallographer, A. V. Shubnikov chose crystallography as his main line and remained faithful to it from the moment of his graduation from the University in 1912 up to the present time.

During World War I A. V. Shubnikov joined the army and was seriously wounded. In 1920 he took the Chair of Crystallography at the newly founded Ural Institute of Mines, and in Ekaterinburg-Sverdlovsk he became closely acquainted with stone-cutting technique at the famous lapidary works where he fully mastered the practical methods of crystal treatment, and later in many respects he substantiated the crystal-treatment theory; he remained a great specialist and teacher of this *métier* in his later years.

In 1926 A. V. Shubnikov was invited by A. E. Fersman to join the Mineralogical Museum of the Academy of Sciences of the USSR, where he headed the Crystallography Department. In 1934, together with the Academy, this Department moved to Moscow; in 1937 it established itself as an independent academic laboratory and, finally, in 1944 the laboratory became the Institute of Crystallography of which A. V. Shubnikov was director up to 1962, when he gave up the administrative duties but continued to lead his Research Laboratory till his death. During the Moscow period of 33 years the 'Shubnikov Child' has achieved the leading world position in the field of crystallography.

A. V. Shubnikov published a number of courses in

crystallography in general, crystal physics in particular, in symmetry, anisotropic systems, and crystal growth. All of them are characterized by exceptional logicity, explanation 'to the very end', and elegance. A. V. Shubnikov was an excellent lecturer and was particularly scrupulous in preparing his lectures; these latter were accompanied by brilliant experiments which, preserved through appropriate films, have now become accessible to the whole crystallographic world.

The great crystallographer was endowed by nature with remarkable appearance well reflected in his portraits: a spare man, above average height, well-groomed (his maternal grandfather was a Scottish

weaver who worked in Russia), with an exceptionally small number of kilograms, he always seemed stern outwardly and inwardly, and each of us would cross the threshold of his private office not without inward tremor; but how he would change, with what enthusiasm he burned when delivering (unfortunately not very often) his lectures on scientific problems that fascinated him or simply when reminiscing about the past. The audience usually greeted him with a storm of applause and his image in focus of this audience will always remain in the memory of all who knew him.

N. V. BELOV  
B. K. VAINSHTEIN

### Meetings

14–18 August 1972: Ottawa, Canada. **International Symposium on Physics and Chemistry of Ice.** Sponsored by the Royal Society of Canada. This symposium will emphasize the fundamental physics and chemistry of ice in all its phases including the clathrate hydrates. It follows earlier symposia held in Erlenbach (1962) and Munich (1968). For copies of the First Circular and further information write to Mr M. K. Ward, Executive Secretary, International Symposium on the Physics and Chemistry of Ice, c/o National Research Council of Canada, Ottawa 7, Canada.

27 August – 7 September 1972: Kyoto, Japan. **Ninth General Assembly and International Congress of the International Union of Crystallography.** Organized by the Science Council of Japan, the meetings will be held in the Kyoto International Conference Hall, Takaragaike, Kyoto. The provisional time-table is as follows: the Opening Ceremony and the first session of the

General Assembly will take place on 27 August; scientific sessions will begin from 28 August. The arrangement of the scientific programme will be broadly similar so that adopted for the Eighth Congress held in the U.S.A. in 1969. Scientific sessions will be composed of Frontier Topics, Open Sessions of Commissions of the Union, and *ad hoc* meetings. Abstracts of contributed papers on subjects covering a wide range of crystallography will be invited. Accepted abstracts will be printed in a book of *Abstracts*, which will constitute the scientific content of the Congress. Acceptance of an abstract will not necessarily lead to an opportunity for oral presentation in the formal programme. The *ad hoc* meetings will be arranged with the intention of encouraging free discussion as well as the oral presentation of results. Unlike the previous Congresses, neither Symposia nor Topical Meetings will be planned before or after the Congress. However, some of the Frontier Topics will receive specific emphasis.

Further details of the Congress, including arrangements for registration, transportation, accommodation, scientific visits *etc.*, will be described in the *First Circular* (an Information Booklet) which will be distributed about September, 1971. Through the National Committees for Crystallography the Japanese Organizing Committee will distribute separate copies of the above announcement with a *Pre-registration Card*, early in 1971. This card will also serve as a request form for the *First Circular*. These materials will be obtainable from the Secretaries of National Committees for Crystallography, and also from the Executive Secretary of the International Union of Crystallography or directly from Professor Y. Saito at the address given below. For further information write to Professor Yoshihiko Saito, General Secretary, Organizing Committee, IX International Congress of Crystallography, Science Council of Japan, 22–34, Roppongi 7 chome, Minato-ku, Tokyo 106, Japan.

### Calendar of Events

*The following events have already been listed in earlier issues of Journal of Applied Crystallography. Further details can be found by consulting the references given.*

21 June–2 July 1971: Leiden, The Netherlands. **International Summer School on Crystal Growth.** See *J. Appl. Cryst.* Vol. 3, part 5, p. 425.

5–9 July 1971: Marseille, France. **Third International Conference on Cryst-**

**tal Growth.** See *J. Appl. Cryst.* Vol. 3, part 1, p. 44.

25–31 July 1971: Boston, Massachusetts, U.S.A. **XXIII International Congress of Pure and Applied Chemistry.** See *J. Appl. Cryst.* Vol. 3, part 4, p. 286.

15–20 August 1971: Kyoto, Japan **International Conference on Mechanical Behavior of Materials.** See *J. Appl. Cryst.* Vol. 3, part 5, p. 425.

25–30 June 1972: Madrid, Spain. **International Clay Conference.** See *J. Appl. Cryst.* Vol. 3, part 4, p. 285.